

## Presampling Activities

### Chapter 2

(default???)

## Presampling Presentation Topics

- Applicability and scope
- Existing information
- Acute hazards
- Chemicals of Concern (COCs)
- Media
- Exposure pathways
- Susceptible areas

## Presampling Presentation Topics (cont)

- Land use
- Classifying areas of the site
- Developing a conceptual site model

## Applicability and Scope

- Identification, collection and review of available site information to focus subsequent site activities in an effective and efficient manner
- Relatively quick and low cost activity, but significance is often overlooked
- May yield information on RISC default applicability

## Gathering and Reviewing Existing Site Information

- Record review
- Sources of information:
  - site records
  - databases (EPA, IDEM, city/county health depts)
  - info on utilities, sewers, regional ground water and surface water records, wellhead protection areas, soil type, regional geology etc.

## Gathering and Reviewing Existing Site Information (cont)

- Maps
  - historic aerial photographs
  - GIS
  - USGS bedrock and topographical
  - state soil surveys
  - Sanborn
  - facility operational

## Gathering and Reviewing Existing Site Information (cont)

- Site visit
  - visual information to identify potential impacts, collect missing info, verify existing info
  - answer questions:
    - materials and wastes stored on/near the property
    - visual evidence of release
    - surrounding land use
    - vegetation types and habitats

## Identify Acute Hazards

- Immediate or imminent threat = mitigate risk before completing RISC evaluation
  - free product
  - spills (327 IAC 2-6-2)
  - corrosive, toxic or flammable vapors
  - acutely harmful exposures

## Identifying Preliminary Chemicals of Concern (COCs)

- Regulated cpd used, treated, stored, or disposed of
- Program-specific (User's Guide)
- COC list modified continuously

## Potential Exposure Pathways

Table 2-1. Default Exposure Pathways Listed by Media and Land Use

Exposure Pathway	Residential Land Use	Commercial or Industrial Land Use	Construction Worker Exposure
Direct Soil Contact	Skin contact Ingestion of soil Inhalation of soil vapors and particulates		
Soil Leaching to Ground Water	Ingestion of ground water contaminated by soil leachate		Not evaluated
Ground Water	Ingestion of ground water  Inhalation of vapors released from ground water	Ingestion of ground water	Not evaluated

## Potential for Susceptible Areas

- Areas of special consideration
  - Geology
  - Nonhuman receptors
  - Wellhead Protection Areas
- Will be addressed on Day 4

## Determining Land Use

- Why?
- Commercial/Industrial vs Residential
  - Table pg 2-9 and Appendix 4
  - residential includes agricultural and some portions of commercial/industrial
- Present vs. future
  - OSWER directive in Appendix 7 will be discussed on Day 5

## Classifying Areas of the Site

Table 2-2. Classifying Areas of the Site Prior to Surface Soil Sampling

Category	Definition	Basis for Classification
Unlikely to be Contaminated	An area where there is no reason to suspect contamination	Historical site data that is reasonably complete and accurate
Known to be Contaminated	An area where releases are known to have occurred	Previous sampling data, records that document contamination, visibly stained soils, soil odors, or other investigation data that indicate contamination is present
May be Contaminated	An area that cannot be classified in either of the other two categories	Ambiguous or incomplete information or a lack of data

## Conceptual Site Model (CSM)

- Map or diagram summarizing all the info
- Incorporate relevant presampling info to the extent possible including area classification
- Iterative interactive organizational process